

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

The claims have been amended to recite that there is no roller bearing at the suction side of the rotor shafts. Basis for this can be found at page 10, lines 5-7.

According to the specification, the use of roller bearings in compressors using low viscosity lubricating fluids, such as refrigerant compressors using the compressed refrigerant as the lubricating fluid is undesirable because the lubricant cannot readily reach the roller surfaces (page 5, lines 6-10; 14-18). Therefore, in order to achieve improved lubrication in such a case, angular ball bearings may be used. This, in turn, introduces the problem of accommodating thrust loads which, according to the invention, is accomplished by holding the suction side angular ball bearing movably in the thrust direction and the discharge side angular ball bearing immovably in the thrust direction. Needless to say, however, the presence of roller bearings in such a case is inconsistent with the ability to use a low viscosity lubricant, which is the motivation for using angular ball bearings. **Accordingly, the presence of the particularly claimed arrangement of angular ball bearings *coupled with the absence of roller bearings*, at least at the suction side, is a feature of the invention which is now explicitly claimed.**

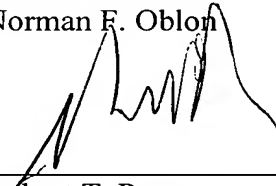
Claims 1-9 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. patent 3,388,854 (Olofsson). This reference discloses a thrust balancing rotary compressor having, at each end, both *roller bearings* 8 and thrust absorbing ball bearings 9-11. The ball bearings 9, 11 at the suction side are balanced in the thrust direction between spring 35 and balancing piston 36 in order to provide more even load distribution on the bearings.

In the case of the ball bearings 9-11, Olofsson describes that they may be "angle ball bearings" (col. 2, lines 2-5). *However, there is no description that the roller bearings 8 may be replaced by angular ball bearings.* Thus the amended claims clearly are not anticipated by this reference. Additionally, the claims are not rendered obvious by Olofsson since Olofsson uses oil lubrication (col. 2, lines 25-27), and so there would have been no motivation for those skilled in the art to have abandoned the use of roller bearings therein. The amended claims therefore define over the prior art.

Applicant therefore believes that the present application is in a condition for allowance and respectfully solicits an early notice of allowability.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon



---

Robert T. Pous  
Attorney of Record  
Registration No. 29,099

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)  
RTP:ajf